

UNIVERSAL SERVICE ORDER CODE (USOC): JM25X

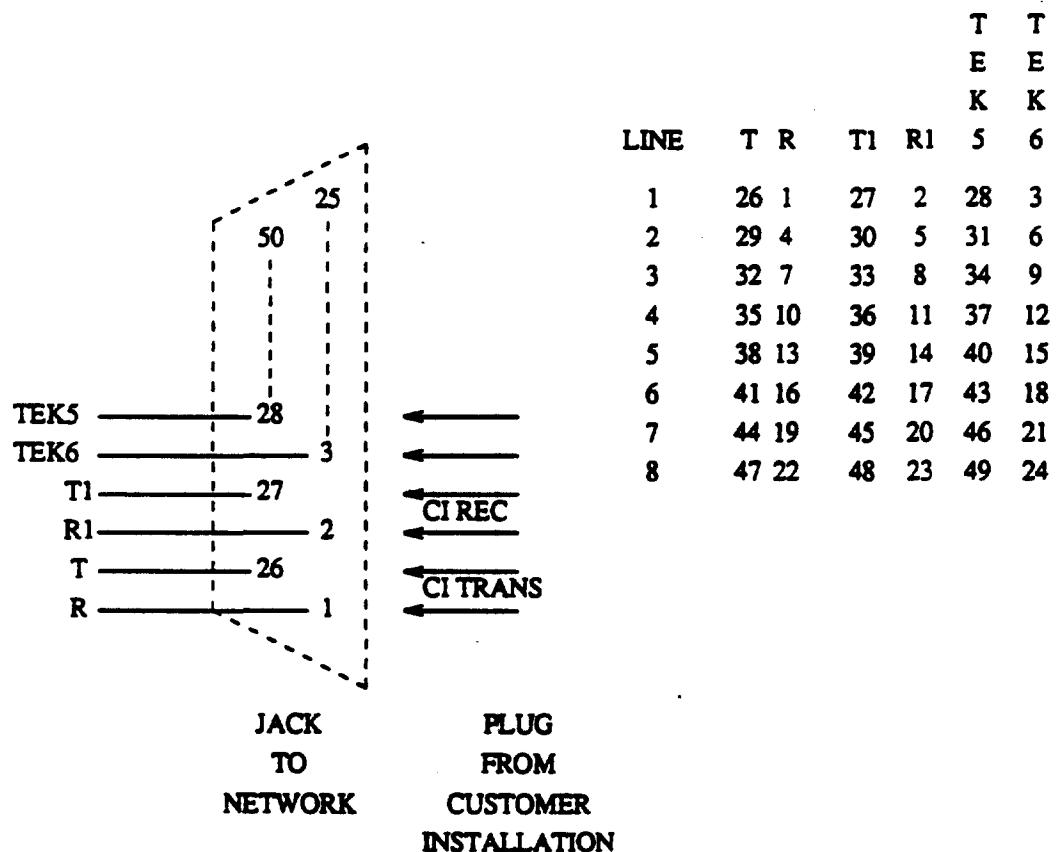
ELECTRICAL NETWORK CONNECTION: UP TO 8 TIP/RING AND TIP1/RING1 CONNECTIONS

MECHANICAL ARRANGEMENT: 50 POSITION MINIATURE RIBBON JACK

USAGE: MULTIPLE NON-REGISTERED VOICE BAND ANALOG PRIVATE LINE SERVICES

INTERFACE CODES: 06DA2; 04DA2; 02DA2; 02DE2; 04DE2; 02PR2; 04PR2; 02TF2; 04TF2

WIRING DIAGRAM:



NOTE: THE EXCHANGE CARRIER WILL WIRE THE LINES TO THE CONNECTOR IN THE SEQUENCE DESIGNATED BY THE CUSTOMER.

NOTE: FOR TWO WIRE APPLICATIONS the T & R PINS (1 & 26, 4 & 29, ETC.), ARE THE CUSTOMER TRANSMIT AND RECEIVE PAIR

NOTE: FOR TEK LEAD FUNCTIONS SEE BELLCORE TR-EOP-000242

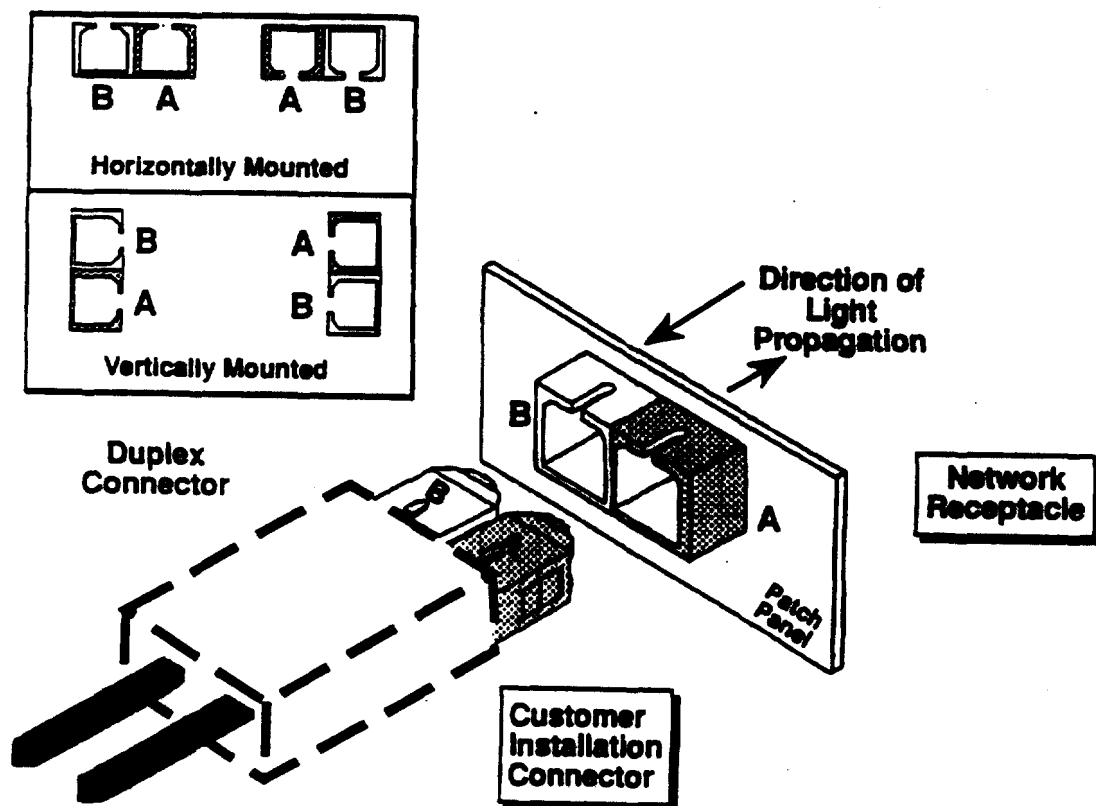
UNIVERSAL SERVICE ORDER CODE (USOC) SJASC

OPTICAL NETWORK CONNECTION: SINGLE MODE OPTICAL FIBER

MECHANICAL ARRANGEMENT: DUPLEX CONNECTOR

USAGE: CONNECTION OF SINGLE MODE OPTICAL FIBERS AS SPECIFIED FOR BROADBAND ISDN AT THE NI

DIAGRAM:



Legend:

-  - Position "A"
-  - Position "B"

Note: Shading For Clarification Only

6. CUSTOMER PREMISES CONNECTOR WIRING CONFIGURATIONS

<u>PAGE</u>	<u>FIGURE</u>	<u>CONNECTOR</u>	<u>ISSUE DATE</u>
60	6.1	T568A	December, 1993
61	6.2	T568B	▪
62	6.3	568SC	▪

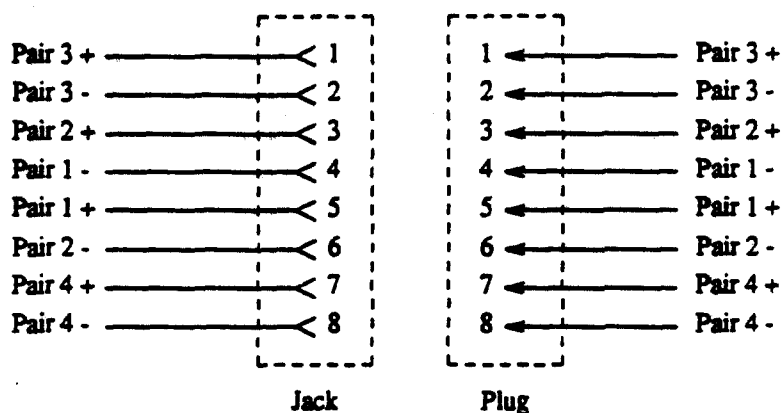
PREMISES CONNECTOR DESIGNATION: T568A

ELECTRICAL NETWORK CONNECTION: UP TO FOUR PAIRS T/R

MECHANICAL ARRANGEMENT: 8 POSITION MINIATURE MODULAR JACK

USAGE: CONNECTION OF FOUR PAIR
UNSHIELDED TWISTED PAIR
AS SPECIFIED IN ANSI
EIA/TIA 568 & ANSI
EIA/TIA 570

WIRING DIAGRAM:



Note 1: Positive (+) and Negative (-) are used to identify the individual conductors and do not impose any restriction on the polarity of the conductors.

Note 2: The + conductor is connected to the "Tip" lead at the network demarcation point and the - conductor is connected to the "Ring" lead.

Note 3: The Standard coding methods are depicted below:

Connector Wire	Number	Print	Color
Terminal	Method	Method	Method
Pair 1 +	5	W-BL	White-Blue
Pair 1 -	4	BL	Blue
Pair 2 +	3	W-O	White-Orange
Pair 2 -	6	O	Orange
Pair 3 +	1	W-G	White-Green
Pair 3 -	2	G	Green
Pair 4 +	7	W-BR	White-Brown
Pair 4 -	8	BR	Brown

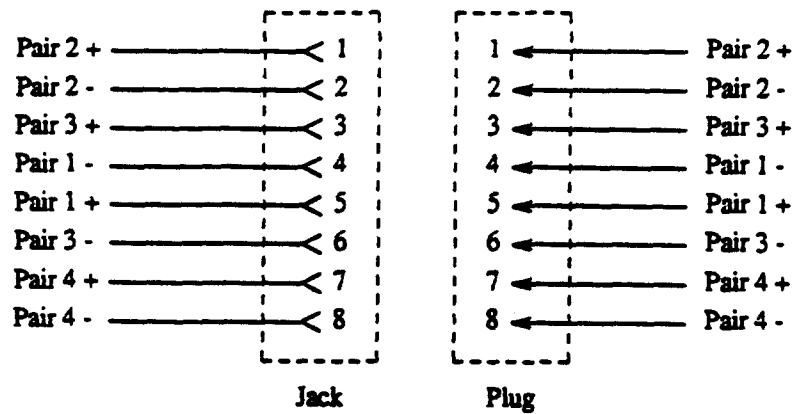
PREMISES CONNECTOR DESIGNATION: T568B

ELECTRICAL NETWORK CONNECTION: UP TO FOUR PAIRS T/R

MECHANICAL ARRANGEMENT: 8 POSITION MINIATURE MODULAR JACK

USAGE: OPTIONAL CONNECTOR FOR FOUR PAIR UNSHIELDED TWISTED PAIR WIRING AS SPECIFIED IN ANSI EIA/TIA 568 & ANSI EIA/TIA 570

WIRING DIAGRAM:



Note 1: Positive (+) and Negative (-) are used to identify the individual conductors and do not impose any restriction on the polarity of the conductors.

Note 2: The + conductor is connected to the "Tip" lead at the network demarcation point and the - conductor is connected to the "Ring" lead.

Note 3: The Standard coding methods are depicted below:

Connector Wire	Number	Print	Color
Terminal	Method	Method	Method
Pair 1 +	5	W-BL	White-Blue
Pair 1 -	4	BL	Blue
Pair 2 +	1	W-O	White-Orange
Pair 2 -	2	O	Orange
Pair 3 +	3	W-G	White-Green
Pair 3 -	6	G	Green
Pair 4 +	7	W-BR	White-Brown
Pair 4 -	8	BR	Brown

568SC

SINGLE & MULTI-MODE OPTICAL FIBER

SIMPLEX OR DUPLEX CONNECTOR

CONNECTION OF SINGLE MODE AND MULTIMODE OPTICAL FIBERS AS SPECIFIED IN ANSI EIA/TIA 568A

Diagram illustrating the correct wiring for a patch panel using the cross-over method.

The diagram shows a patch panel with two ports, A and B. Port A is connected to the top of a duplex connector, and Port B is connected to the bottom. The duplex connector is then connected to a cabling side. The diagram also shows the correct wiring for a patch panel using the straight-through method.

Legend:

- Shaded area = Position "A"
- Unshaded area = Position "B"

Note: Shading For Clarification

APPENDIX A: Obsolete Network Interface Connector Configurations Presently in Part 68

The network interface connector configurations listed in this section are presently in Part 68 of the FCC's Rules and Regulations, but because of the divestiture of the Bell System and the Commission's deregulation of premises wiring, these connector configurations can and are being provided by customers on their side of the network interface. These connector wiring configurations listed in this appendix are provided for information only.

List of Connector Configurations:

RJ16X

RJ31M

RJ31X

RJ36X

RJ38X

RJ71C

UNIVERSAL SERVICE ORDER CODE (USOC):

RJ16X

ELECTRICAL NETWORK CONNECTION:

**SINGLE LINE TIP AND RING WITH
MODE INDICATION TO A SERIES
CONNECTION.**

MECHANICAL ARRANGEMENT:

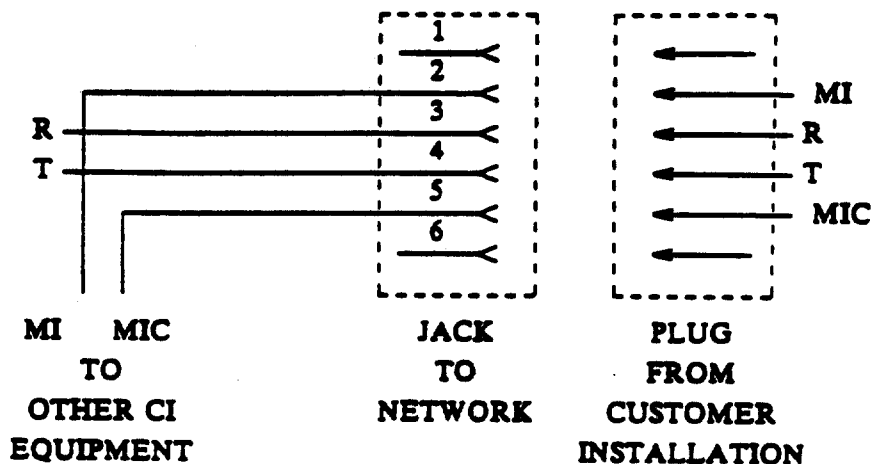
**6 POSITION MINIATURE MODULAR
JACK**

USAGE:

**-9dBm (PERMISSIVE) DATA EQUIPMENT
WITH MI (MODE INDICATION) AND
MIC (MODE INDICATION COMMON)
LEADS**

INTERFACE CODES:

WIRING DIAGRAM:



UNIVERSAL SERVICE ORDER CODE (USOC):	RJ31M
ELECTRICAL NETWORK CONNECTION:	MULTIPLE TIP AND RING
MECHANICAL ARRANGEMENT:	UP TO EIGHT 8 POSITION MINIATURE SERIES JACKS IN A MULTIPLE MOUNTING ARRANGEMENT
USAGE:	MULTIPLE EXCHANGE ACCI LINES TO ALARM REPORTIN DEVICES
INTERFACE CODES:	
WIRING DIAGRAM:	

MULTIPLE MOUNTINGS OF UP TO 8 RJ31X CONNECTORS
(see Appendix A3)

UNIVERSAL SERVICE ORDER CODE (USOC):

RJ31X

ELECTRICAL NETWORK CONNECTION:

SERIES TIP AND RING CONNECTIC
AHEAD OF ALL STATION EQUIPMENT

MECHANICAL ARRANGEMENT:

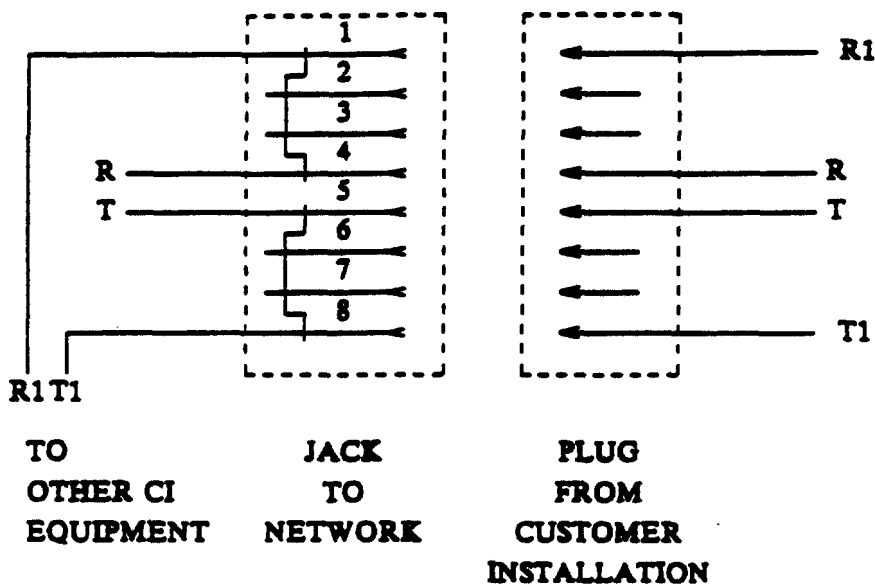
8 POSITION MINIATURE SERIES
JACK

USAGE:

EXCHANGE ACCESS LINES TO
ALARM REPORTING DEVICES.

INTERFACE CODES:

WIRING DIAGRAM:



NOTE: SHORT REMOVED BY INSERTION OF PLUG

UNIVERSAL SERVICE ORDER CODE (USOC):

RJ36X

ELECTRICAL NETWORK CONNECTION:

SERIES TIP AND RING CONNECT
WITH MODE INDICATION TO ST/
BEHIND SERIES CONNECTION

MECHANICAL ARRANGEMENT:

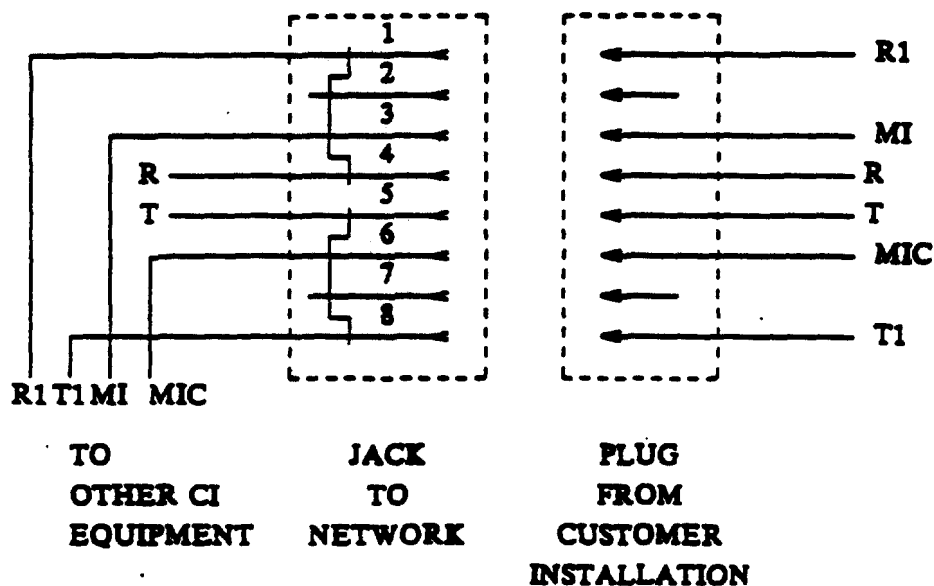
8 POSITION MINIATURE SERIES
JACK

USAGE:

EXCHANGE ACCESS LINES TO
TERMINAL EQUIPMENT WITH MI
INDICATION IN SERIES WITH A
DATA JACK. CUSTOMERS SHALL
SPECIFY WHETHER A CLOSURE O
OPEN SHALL INDICATE
"EXCLUSION" MODE.

INTERFACE CODES:

WIRING DIAGRAM:



NOTE: SHORT REMOVED BY INSERTION OF PLUG

UNIVERSAL SERVICE ORDER CODE (USOC):

RJ38X

ELECTRICAL NETWORK CONNECTION:

SERIES TIP AND RING CONNECTIO.
WITH CONTINUITY CIRCUIT

MECHANICAL ARRANGEMENT:

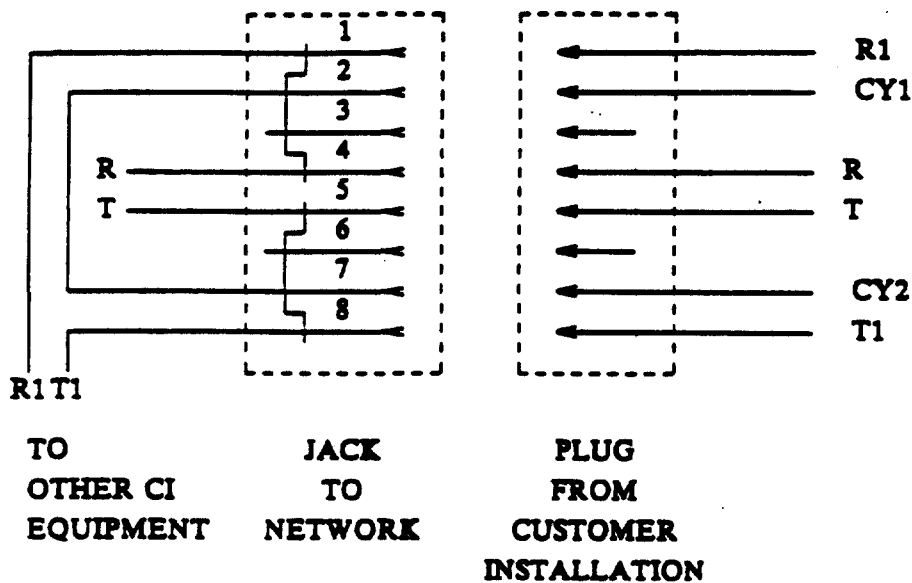
8 POSITION MINIATURE SERIES JACK

USAGE:

EXCHANGE ACCESS LINES TO ALARM
REPORTING DEVICES WITH
CONTINUITY CIRCUIT (CY)

INTERFACE CODES:

WIRING DIAGRAM:



NOTE: SHORT REMOVED BY INSERTION OF 8 POSITION PLUG

UNIVERSAL SERVICE ORDER CODE (USOC):

RJ71C

ELECTRICAL NETWORK CONNECTION:

MULTIPLE SERIES TIP AND RING CONNECTIONS

MECHANICAL ARRANGEMENT:

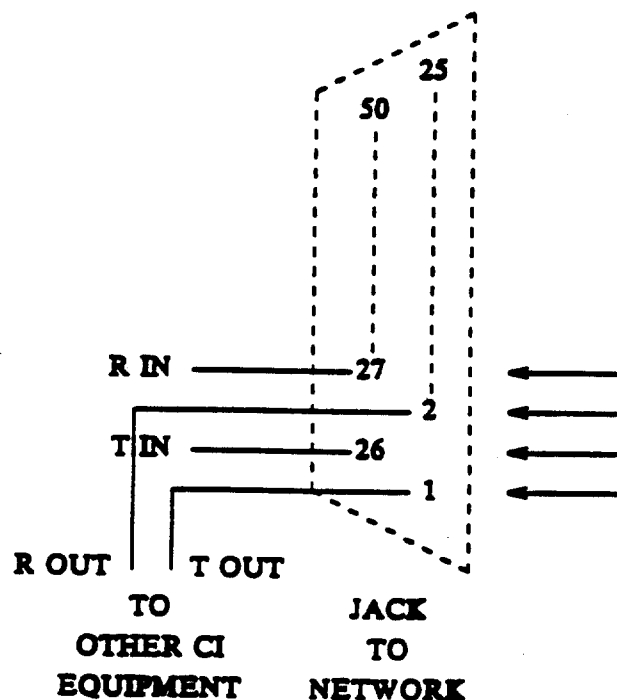
50 POSITION MINIATURE RJ45 JACK

USAGE:

SERIES DEVICES TO MULTIPLE EXCHANGE ACCESS LINES

INTERFACE CODES:

WIRING DIAGRAM:



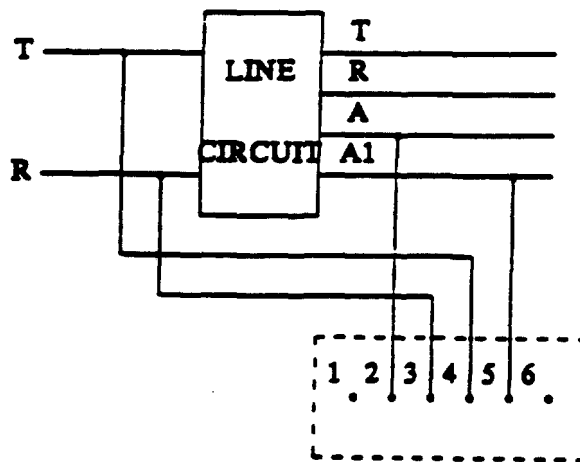
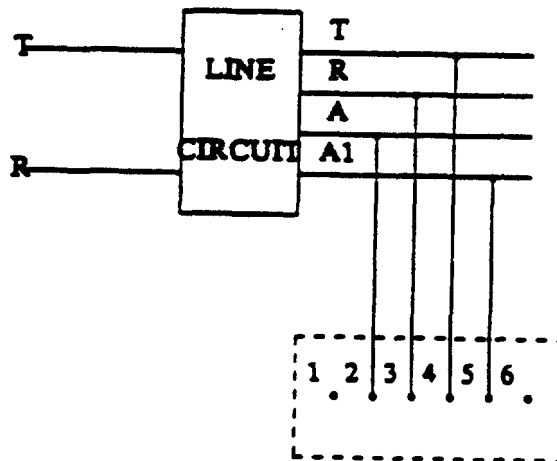
LINE	TI	RI	TO	RO
1	26	27	1	2
2	28	29	3	4
3	30	31	5	6
4	32	33	7	8
5	34	35	9	10
6	36	37	11	12
7	38	39	13	14
8	40	41	15	16
9	42	43	17	18
10	44	45	19	20
11	46	47	21	22
12	48	49	23	24

APPENDIX B: Obsolete Connector Configurations Removed From Part 68

The connector configurations listed in this section were at one time listed in Part 68 of the FCC's Rules and Regulations. The configurations were removed due to changes in the rules and are no longer available from carriers as network interface connector configurations. Some of the configurations are used for connection of customer premises equipment to customer premises equipment.

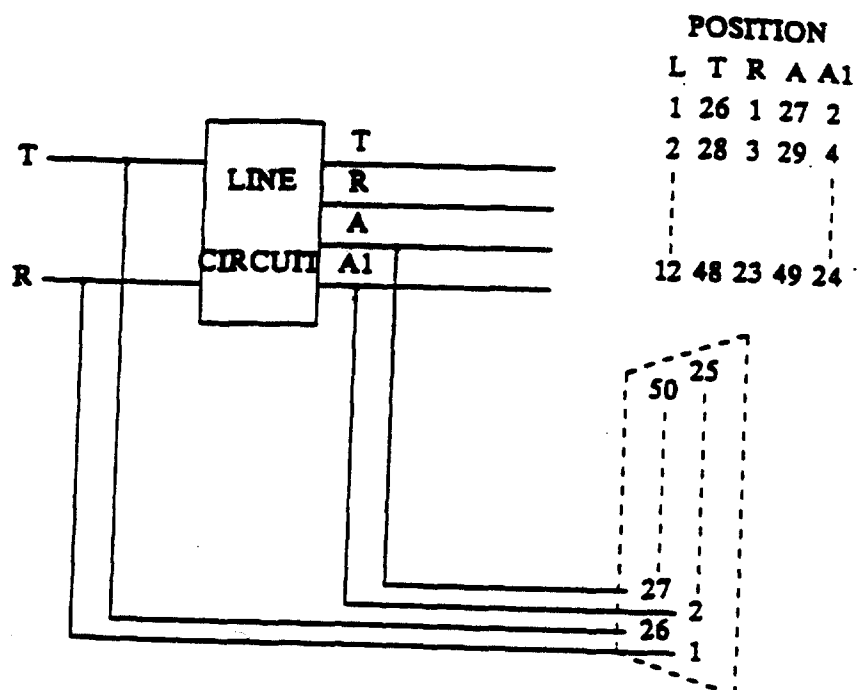
List of Connector Configurations:

RJ12C/W	RJ13C/W	RJ22X
RJ23X	RJ24X	RJ32X
RJ32M	RJ33M	RJ33X
RJ34M	RJ34X	RJ35M
RJ35X	RJ37X	RJ42M
RJ42S	RJ43M	RJ43S
RJ46M	RJ46S	RJ47M
RJ47S	RJ51X	RJ52X
RJ53X	RJ54X	

RJ12 C/W**Single line T,R,A & A1 with T&R ahead of line circuit****RJ13 C/W****Single line T,R,A & A1 behind the line circuit**

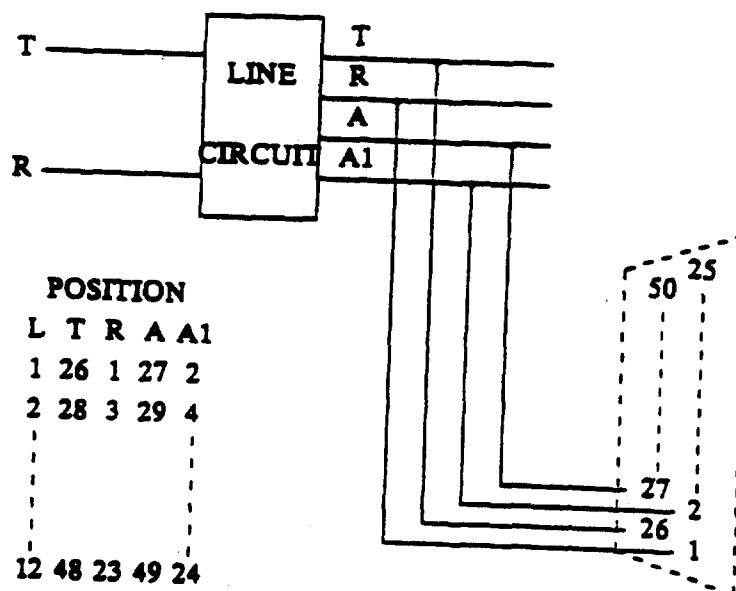
RJ22X

Multiple lines T,R,A and A1 with T&R ahead of line circuit



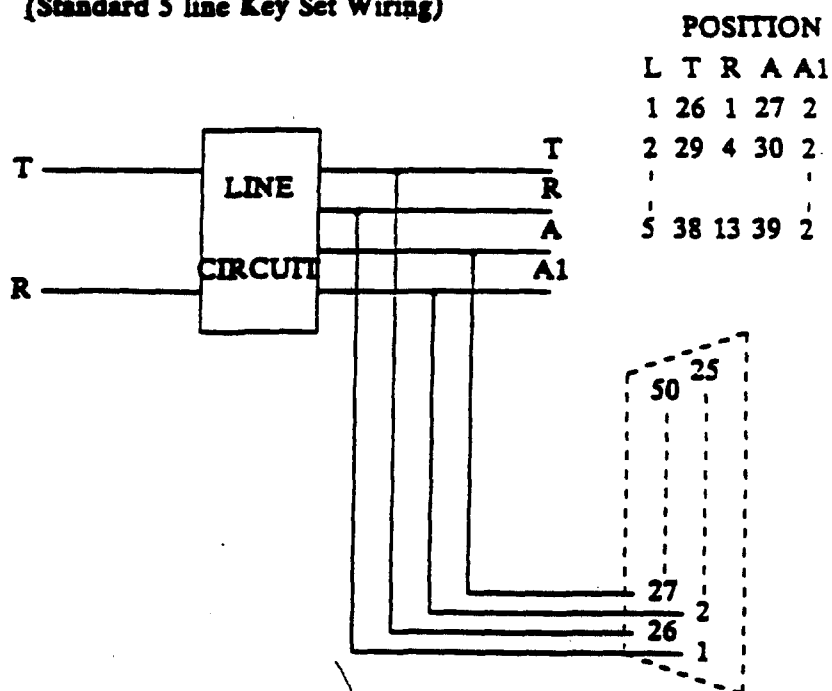
RJ23X

Multiple lines T,R,A and A1 behind line circuit



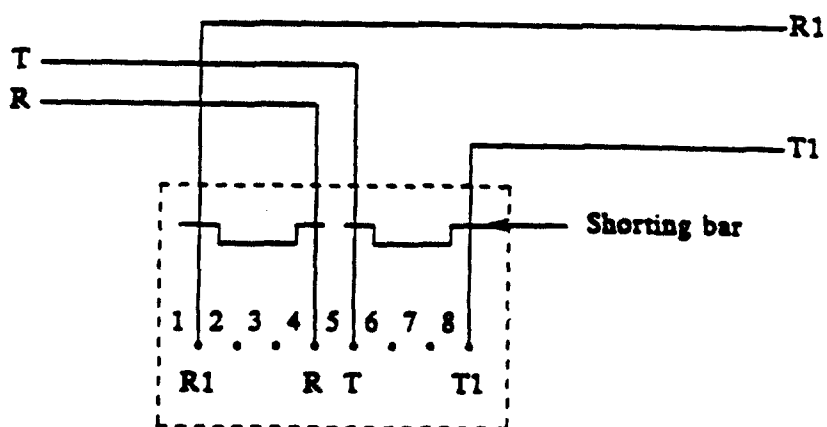
RJ24X

Multiple lines T,R,A and A1 behind line circuit
(Standard 5 line Key Set Wiring)



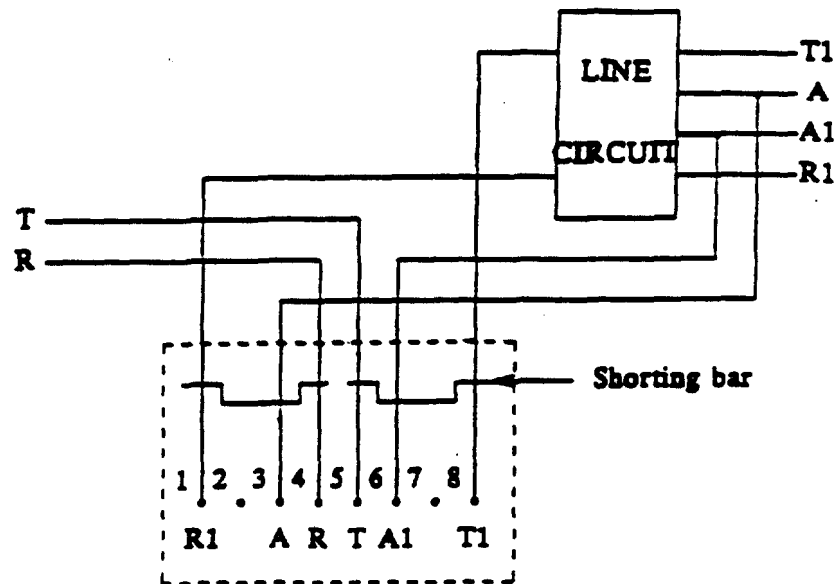
RJ32X

Series Tip and Ring

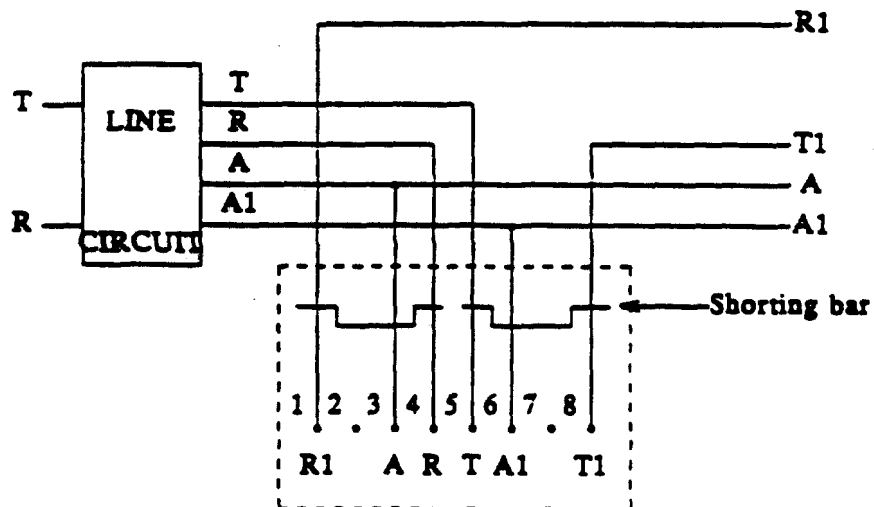


RJ33X

Series T,R,A and A1 Tip and Ring ahead of the line circuit

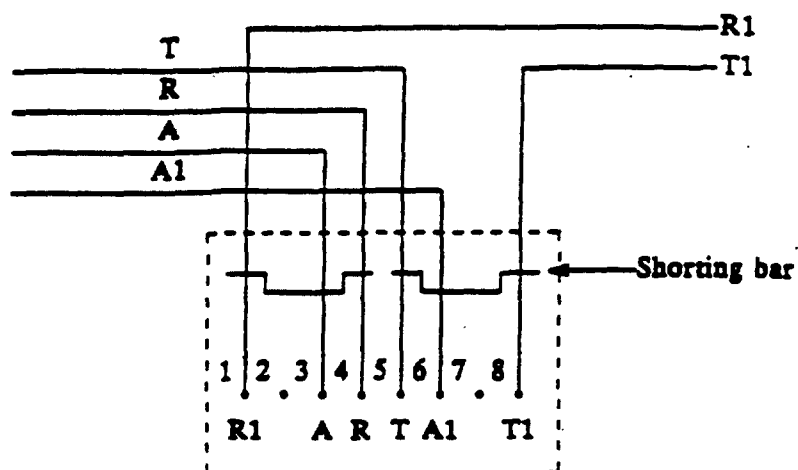
**RJ34X**

Series T,R,A and A1 Tip and Ring behind the line circuit

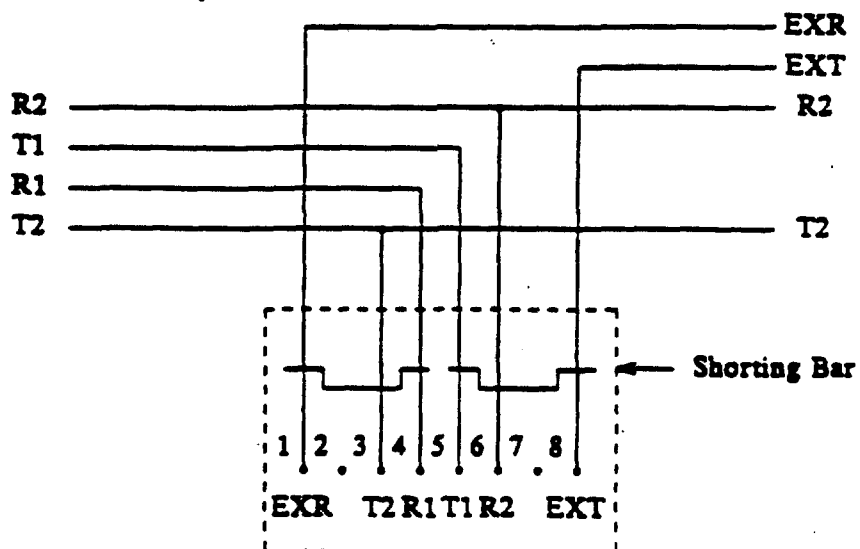


RJ35X

Series T,R,A and A1 Tip and Ring behind a key set

**RJ37X**

Two Line Telephone with Exclusion on Line One



RJ32M

Multiple Series T/R at station.

RJ33M

Multiple Series T/R ahead of the line circuit of a key telephone system, with A/A1.

RJ34M

Multiple Series T/R behind the line circuit of a key telephone system, with A/A1.

RJ35M

Multiple Series T/R behind line circuits leading to one key telephone station instrument of a key telephone system, with A/A1.

RJ42S

Universal 8 position keyed data jack with T/R connected ahead of the line circuit.

RJ43S

Universal 8 position data jack with T/R connected behind the line circuit.

RJ46S

Programmed 8 position keyed data jack with T/R connected ahead of the line circuit.

RJ47S

Programmed 8 position keyed data jack with T/R connected behind the line circuit.

RJ42M

Multiple Universal 8 position data jacks with T/R connected ahead of the line circuit.

RJ43M

Multiple Universal 8 position data jacks with T/R connected behind the line circuit.

RJ46M

Multiple Programmed 8 position data jacks with T/R connected ahead of the line circuit.

RJ47M

Multiple Programmed 8 position data jacks with T/R connected behind the line circuit.

RJ51X

Universal 50 position ribbon jack with T,R,A & A1, mode indication and T/R connected ahead of the line circuit.

RJ52X

Universal 50 position ribbon jack with T,R,A & A1, mode indication and T/R connected behind the line circuit.

RJ53X

Programmed 50 position ribbon jack with T,R,A & A1, mode indication and T/R connected ahead of the line circuit.

RJ54X

Programmed 50 position ribbon jack with T,R,A & A1, mode indication and T/R connected behind the line circuit.

APPENDIX C

Appendix C: Data Applications

The connector configurations listed in this section are arrangements of connector configurations which are provided to allow connection of multiple connectors or combinations of customer premises equipment.

List of Connector Configurations:

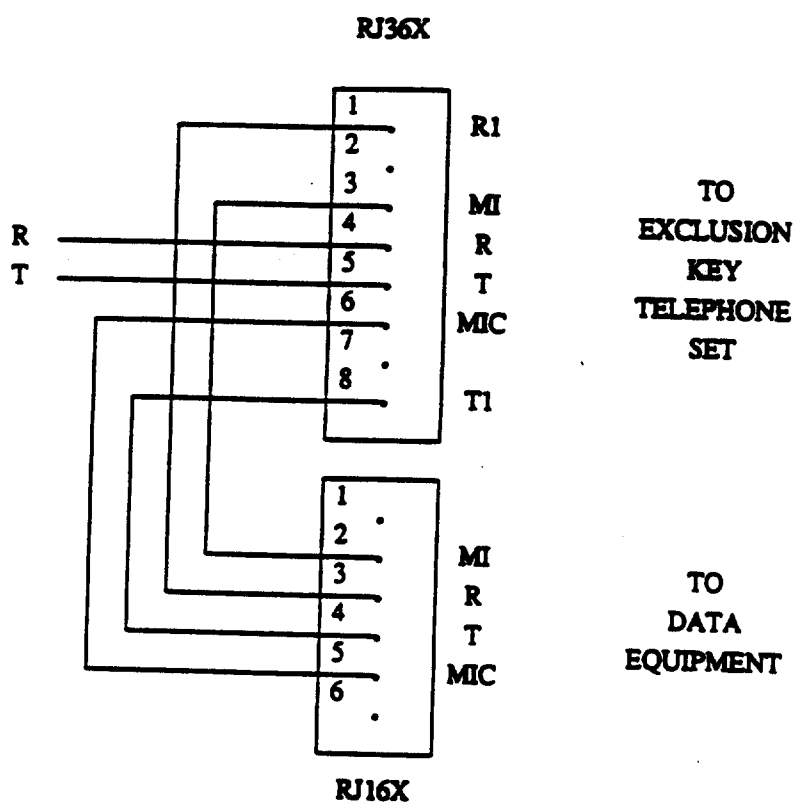
RJ16X/RJ36X

RJ36X/RJ45S

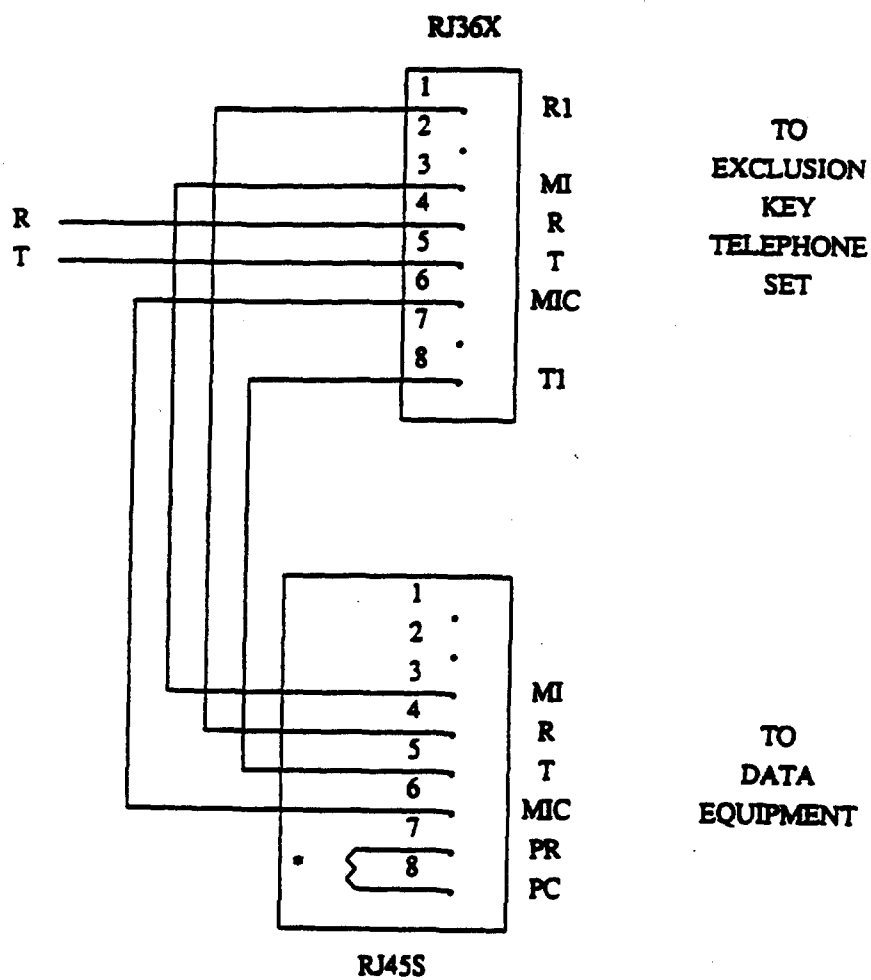
RJ45M

RJ41M

PERMISSIVE DATA JACK WITH EXCLUSION
KEY TELEPHONE ARRANGEMENT



**PROGRAMMED DATA JACK WITH EXCLUSION
KEY TELEPHONE ARRANGEMENT**



* PROGRAMMING RESISTOR

UNIVERSAL SERVICE ORDER CODE (USOC):	RJ45M
ELECTRICAL NETWORK CONNECTION:	MULTIPLE TIP AND RING PROGRAMMABLE
MECHANICAL ARRANGEMENT:	8 POSITION KEYED MINIATURE MODULAR JACKS IN A MULTIPLE MOUNTING ARRANGEMENT
USAGE:	MULTIPLE EXCHANGE ACCESS LINES TO PROGRAMMABLE DATA TERMINAL EQUIPMENT
INTERFACE CODES:	02LS2
WIRING DIAGRAM:	

MULTIPLE MOUNTINGS OF UP TO 16 INDIVIDUAL RJ45S CONNECTORS
(see 5.1.14)